

432 MHz AND ABOVE EME NEWS

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CONDITIONS

Dec makes it 3 in a row! 3 consecutive SWs with generally excellent conditions. SSB conditions were some of the best I have experienced on 1296. There are reports of a 4-way round table with 75 m like quality. Maybe its time for an EME Rag Chew award?

N4UK Dxpedition

The Jan SW happens to coincide with the ARRL's Jan VHF Contest. This contest allows contacts on EME and is open to worldwide participation. The contest runs from 1900 on 18 Jan to 0400 20 Jan. NA stations in particular will be looking for contest EME QSOs. The exchange is simply a the 4 character grid square (i.e. FN20). During the contest weekend WD8ISK will be conducting a 70 cm EME dxpedition to SC (EM84) under the call of N4UK. Skeds for N4UK are in this NL. They will be operating on 432.031 for both sked and random contacts, but listening .033 to .037 for random calls. Complete details are in the last NL under WD8ISK's report [erroneously listed as W8ISK].

DUBUS/REF DATES

Now the ARRL Contest is over, it is time to start thinking of the EU EME Contest. The dates are not that far way. The 1st leg for 144/1296 is the weekend of 22/23 March, and the 2nd for 432/2300 up is 12/13 April.

4X6UJ

Howie reports that they will do their best to be QRV on 1296 on 18/19 Jan. They have moved to another location and as of now are still installing the shack. [TNX LA8LF for relaying this report.]

7M2PDT

Shu was active on 432 during the Dec SW. He worked on 21 Dec W7QX, JA9BOH, JA4BLC, DF3RU, OK1KIR for initial #66, I5MPK #67 and I5CTE #68, and on 22 Dec I5TDJ #69. Heard were G3HUL, DK3WG, JH0YSI, JA5OVU, JS3SIM, NC1I and KA0RYT. Shu's TX power is now about 1800 w.

AA6WI

Hoppy's 23 cm EME activity report for the Dec SW follows -- I worked on 20 Dec CT1DMK initial #111 and DXCC #25, N2IQU and K2DH, on 21 Dec CT1DMK, LA8LF and G3LTF, on 22 Dec K2UYH, W2UHI and IK3COJ, and on 23 Dec N2IQU, WA8WZG #112 and WAS 24 and NL7F #113 and WAS 25. S59DCD was (O) copy on our 22 Dec sked during his 1st transmission and then I lost him. I would like a resked.

CT1DMK

Luis writes on his 23 cm activity -- I dedicated most of my free time to completing my 23 cm PA. Actually completing one half of PA which in the near future will consist of 2 GI7b coaxial cavities in parallel for a bit more power. In Dec I was active with 500 w, with good results. I could hear my echoes peaking 12 dB above noise. SSB echoes were good, but not all the time. I have worked on 14 Dec ZS6AXT (O/O), W2UHI (559/439) and on SSB (44/41) - my 1st QSO on SSB with a similar sized station, on 15 Dec IK3COJ (O/O) for an initial #, ZS6AXT (539/529), N2IQU (54/43) on SSB, HB9BHU (549/549) #, KB2AH (559/559) and SSB (55/52) and W2UHI (559/549), and on 20/21 Dec AA6WI (559/449) #, K2DH (555/O) - finally got the call correctly (some hum problem on K2DH's TX), AA6WI (559/449), K2DH (555/529), HB9SV (449/549), ZS6AXT (449/559), G3LTF (449/559) #, VE6TA (O/O)#, PA3CSG (559/549) #, LA8LF (559/559), WB5LUA (559/449), W2UHI (559/539), N2IQU (55/45) on SSB, K2UYH (54/44) on SSB, F1ANH (539/549), ZS6AXT (539/559), F1ANH (52/43) on SSB, W2UHI (539/539), LA8LF (549/539) and VE3BQN (O/O) #. On Christmas day at 0115 (also local time), I interrupted the traditional family festivities to show my father (CT1RO, an old timer) some EME echoes on 1296, (an extremely high frequency in his opinion...). We had the luck to find W2UHI for a QSO and we exchanged HO! HO! HO! for reports in CW and SSB. Thanks Frank for the nice Christmas gift you gave him.

DD1XF

Frank was only able to QRV on 1296 on moonrise during the Dec SW. He worked JA4BLC, JH5LUZ, PA3CSG, F1ANH and IK3COJ for an initial.

DL3EAG

Stephan writes on his doings during the SW -- I worked N4GJV on sked, K4QI and JA5OVU on random. Heard were K1FO, N2IQU and JS3SIM, but conditions were not good. My elevation stops at 32-45 deg depending on the azimuth, e.g. 150 az and 45-50 el is possible, but at 185 az only 37.5 el! I hope to change this next year and also to improve my RX. I had skeds with 7M2PDT, JA2KRW and JS3SIM. On Saturday I heard only JS3SIM very weak. On Saturday DK3FB, Ruediger was able to take over my skeds, after I tried several times, and worked all three. He also had success with EA8/ON5FF on Sunday night. Thanks for our nice QSO [K2UYH]. The station that followed me was Gerald, DL4KG. He's using 4x23 el BV yagis and 600 w.

DL9KR

Jan brings us up to date on his activity during the past half year - - EMEwise, last summer was a disappointment. The V46 dxpedition, 3V8BB and LY2BIL never made it to 432. A heavy workload allowed for minimal time off the moon. Since my last report I added initials on 23 March OZ4MM #639 and WB6IMC #640, on 21 April WE7P #641, on 24 May LU7DZ (new QTH) #642, on 22 June JA2QY #643, on 6 July DH5NAH #644, and on 28 Sept PA2CHR #645. During the whole contest aligned pol prevailed. This led to frequent one-way skips between JA and EU, respectively EU and USA. Understandably one sometimes had the feeling that US stations were deaf and accordingly the JA's must have felt that the EU's were deaf. WX was OK most of the time, absolutely no technical problems. During the 2nd part I used my newly acquired TS870 which made those 30 kHz look huge. It gave me the feeling I was using a sort of microscope. I used the 200 Hz bandwidth plus a 500 Hz offset. However, I did not find the various DSP features very helpful. The beast aspect of the contest was the richness of initials, 18! I worked on 26 Oct SM4IVE, K2UYH, RA3LE, VE1ZJ, SM3BYA, F5SDD for initial #646, G4ALH, EA3DXU, W8MQW, KD4LT, CT1DMK, S57Q, WD5AGO, PY5ZBU, K4QIF #647, PA3CSG, DL9NDD, K0RZ, G4FUF, DL6NAA, IK0EQJ, G4RGK, WA4NJP, VE6TA, KB8ZW, OH2PO, KF0M #648, UT7VF, UR5LX, K5AZU, DL0EME, UT5DL, F1ANH, IN3KLQ, OZ4MM, DF6NA, WB6IMC #649, DL1EJA #650, W6VPH #651, KB8HH, OE5JFL, K9BCT, UA6LGH, W7FN, DF3RU, SM3AKW, K5GW, N2IQU, K1FO, IK6EIW, 7M2PDT, JA9BOH, 9M2BV, OM1TL, JR9NWC, JR4JLV, JA5OVU, JA2KRW, JR4AEP, DL0IL #652, JL1ZCG, UA4API, ON4KNG, G3HUL, SP5CJT, DK3WG, ON5OF, UT1PA, G3LQR, DL8OBU, HA1YA, I5CTE, JA2TY, IW5AVM, DK0NA, UA9FAD, Y02IS, JS3SIM, I2COR, OE3JPC and DL3EAG, on 27 Oct NC1IL, PA2CHR, K5WXN, N9AB, KA0RYT, W1ZX, DJ6MB, KL7HFQ, W2CRS, W7HAH, ZS6AXT, WA6BJE, HP3XUG, DL0AR, UT5EC, JJ1NNJ, JA4BLC, JA6XED, OK1KIR, F2TU, SM2CEW, DL9EBL, 4X1IF, DK8VS, DF0PH, ZS6AXT dup and G3SEK, on 25 Nov DK3FB, EA8/ON5FF #653, K5JL, W9QXP, VE1ALQ, K1FO, G3LTF, WI7Z, DL9YEE, W7GBI, W7CI, N4GJV, HB9SV, OMITL dup, HB9SUL, F5SDD dup, JH1XUJ, JA0VI #654, 9M2BV dup, YL3AG, JO3RNL, VK2FZ/4 #655, JH1EFA #656, UR3EP #657, DL6WU, DL8OBU dup and S52CW #658, and on 24 Nov F6hpp, NA4N #659, OK1DFC #660, W0KJY, DJ5MN, DK5MV, DL0DYW, DJ2Pa, WD8ISK #661, HA1VHF (same HA1YA), RA3LE dup, VK5MC, JR1EUX #662 and ZS6PT #665. These were exclusively random QSOs for a total of $145 \times 44 = 629,200$ points. Skeds with NC7K and IK0BZY yielded only partials. F1FEN and F5JJI were CWNRR many times. I nearly made it with JH1EGF? and G4BRK. HZ1AB was close QRV, but could not make it due to an imperative change of QTH. He remains a hopeful for future EME activity.

F6CGJ

Louis reports on his contest activity. He operated on 1296 with his 8 m dish and a new TH293 PA loafing at 500 w - 50% of capacity. His final score was 72x33 [number 2 on the high scores list!]. All QSOs were on random and consisted of 16 USA, 5 VE and 6 JA. Most of the others were in EU. He was disappointed to miss VK5MC, but was pleased to catch 4X6UJ. He added 6 initials during the contest. He found conditions about equally good both contest weekends, and was not too bothered by the poor WX. One thing that did bother him was operating procedure. Louis observed what he considers a display of very poor sportsmanship among several of the big guns pursuing a weak W4. He wonder if some stations still remember what "gentleman" means. As Louis points out its possible for anyone to make a mistake in the heat of a contest, but intentional QRM is something to deplored. In any case the response to poor operating manners should not to display poor manners yourself!

G4LQR

Simon reports a little progress on his microwave EME projects -- I have been running tests on my 14' dish for the higher bands. Sun noise on 3400 MHz is about 11/12 dB, so the 14' dish is OK for

this band. Tests with an 11 GHz TVRO converter seem to indicate it is not good for 3 cm work. I have yet to try 5760, but guess it will show some value there. I presently have only 10 w for these bands, not enough for echo testing. I have made progress on a new GS90 PA for 23 cm, and am also working on a 2C39 cavity for 9 cm. In the ARRL contest, I was active when possible, but high winds and generally bad weather greatly limited my time. I QSO'd in Oct on 70 cm DL9KR, OZ4MM for an initial # and OH2PO, on 1296 F6CGJ, ZS6AXT, HB9BBD #, EA6ADW, DL0SHF, F1ANH, F5PAU, OH2AXH, G3LTF, OE5JFL, OE9XXI, F5AQC, KB2AH, WD5AGO, N2IQU and SM3AKW, and in Nov on 432 K1FO, K4QIF, DK3WG, JA5OVU, HA1YA, OE5JFL, UR5LX, JA9BOH, DL3EJA, SM3AKW and SM4IVE, and on 1296 HB9SV, SM6CKU, OZ4MM, K2UYH and W2UHI #.

G3LTF

Reporting -- My scores for the contest were 47x23 on 432 and 44x23 on 1296. The 2nd contest weekend worked out well for me. The wx was good and calm and the dish tracked well on the new polar mount. I thought that the activity was a bit low on 432 overall though I got 10 initials. I was able at this dec to track and work the moon from about 30 mins after rise to about 20 mins before set which is something I've never been able to do before. Apart from a couple of flashovers on 432 the rigs worked well. On 432 I worked on 23 Nov K4QIF - 1st QSO on 432 from this and his new QTH [initial?], K5GW, DL9KR, PA3CSG, ON4KNG, DL9NDD, VE1ALQ, K0RZ, K2UYH, OE5JFL, K1FO, EA8/ON5FF for initial #301, W7GBI, WD5AGO, KD4LT, W7FN, OH2PO, SM4IVE, SM3AKW, DL3WG, WA4NJP, ON5OF #302, W8MQW #303, W7CI, G4FUF, NC1I and N4GJV, JL1ZCG, OZ4MM, G3SEK, JA5OVU, JA9BOH, UR5LX, DL1EJA #304, HA1YA and SM2CEW, and on 24 Nov DJ6MB, W9QXP #305, KA0RYT #306, K5WXN, WB6IMC #307 and WD8ISK #308, 7M2PDT #309, UT5DL, JS3SIM #310, DL8OBU #311 and EA3DXU. Heard were UT5EC, G3LQR, G3HUL, JR9NWC, F1FEN, OM1TL and JA0VI. CWNr were RA3LE, G4RGK, K5MBN [?], NA4N, DF3RU and I5CTE. On 1296 I worked on 23 Nov LA8LF, F5AQC, OH2AXH dup, HB9SV, IK3COJ, G4CCH, K4QIF, K2UYH, F6KSX for initial #118, SM2CEW and DF3RU #119, and on 24 Nov AA6WI, WD5AGO, VE1ZJ #120, KD5RO, K3EAV, OE9ERC and HB9BHU. Heard were CT1DMK, JH5LUZ, JA6CZD, JH?RG? and KB3PD and CWNr were I2COR and DF9QX. This last weekend I was on both bands as follows: On 21 Dec on 432 I QSO'd at 1701 RA3LE, 1730 JA2KRW for initial #312, 1809 I5MPK and 1815 JA5OVU - not much else, I guess everybody was contest saturated! On 1296 I worked on 21 Dec at 2219 OH2AXH, 2225 ZS6AXT, 2246 CT1DMK for initial #121 and a new country - he has obviously done something good to his PA, 2305 LA8LF, 2327 K2UYH - my 1st SSB QSO from this location - later I copied LA8LF (Q4) and W2UHI (Q5) and 2356 AA6WI, and on 22 Dec 0026 WD5AGO, 1622 JH5LUZ #122, 1649 IK3COJ, 1715 F1ANH and 2208 ZS6AXT. I need to alter the feed to illuminate the whole dish, I'm still using the one that made for the 4.3 m dish. This will make up for the extra 1.5 dB of feeder loss. I now have 150!! It really is nice to be back again!!

HP3XUG

Louis has been traveling and is now heading home. He writes -- It's been a long and hectic period here with very little time for re-building the array. The WX this year stopped me from doing much outside, at those few times I was at home. I took the array down last Feb, cleaned and re-set all the elements on the 4 yagis and checked dimensions. The feedline system K1FO had provided was fine for the low el angles in DU and HL, but really cut into the moon time here. I can't operate at angles below 10-15 deg because of ground effects and problems with the CATV system. I was finally able to get the array back up - actually twice more because of rotor and tower problems that required taking the entire system apart. I re-built the feed system using some of the 1/2" 75 ohm coax, we have lots of here. I used the standard CATV connectors, but added an N-male to the ends. The pins of the CATV cable were soldered to the pin of the N, and it all screws together nicely. I was able to sweep the cables and the VSWR looked real good (1.1:1 @

432.0). Needless to say I was quite pleased. Jay, K5JL was kind enough to take my old preamps and make them right. He reduced my NF from 0.8 dB to 0.45 dB. I am now getting about 11 dB Sun/CS which is probably close to right. And I'm getting much better and much more consistent echoes now. I can even detect some SSB echoes. The single 8874 amp seems to be going soft, as am just able to do 500 w now. I suspect I will have to find a source of one at a reasonable price. In Oct I just ran the array in a temporary set-up. In Nov, I lost the 1st night due to heavy rains, but was able to get on the 2nd night, but was a little disappointed with the results. I had several partials with DL9NDD - very frustrating. I have had poor results at low western angles (JA) and have not able to raise anyone. I copied W7FN and JA9BOH very well, but, no response from Kimio. Don said he called me. It was probably a pol problem. The moon tracking here is interesting. Most of the time I only need to correct the elevation control to follow the moon. This seems to say that a polar mount would be preferred down here. I plan to try one for my 2 m EME array, and if it works out well, I think I'll transfer the 432 array to the same mount. I ran the 2 arrays together in HL, and the performance seemed to be quite decent. There would actually be room to add 4 more yagis on 432. I'm thinking about perhaps using 8 smaller ones (or possible 16). But that's in the future. Space being so limited at this QTH, I can't begin to think about a big dish, yet. I'm now up to 42 QSOs, but only initial #24. Of course being off for most of this year hasn't helped those numbers. In the contest I netted 12x8. I hope to do much better in 97.

JA4BLC

Yoshiro notes the following correction to information on JA EME licensing contained in K1FO's NL report last month and also JE1AAH's DUBUS column -- In Japan, a special license for TX powers of over 50 w on 50, 144 and 432 MHz, over 10 w on 1296 MHz, and over 2 w on 13, 6, 3 cm is required. Unfortunately to obtain this license we are still required TO HAVE special instruction and an on-site inspection visit. We hope to have an easier to obtain, less restrictive high power license in the future. We are particularly working hard to have the regulations changed concerning operation on the higher bands, and are hopeful for the possibility of 10 GHz EME operation from JA during the new year! After the ARRL contest, I worked on 432, on 29 Nov G3LTF (439/449), and on 21 Dec JH0YSI (449/449), W7QX (339/449) as #238, 7M2PDT (449/539) and JH4JLV (449/559). I repaired my TH308/328 PA, the tube blew in March, and am now getting 500 w again. Thanks to VK2BE and N2LIV for their help in getting replacement tubes. With this amplifier I worked on 1296, on 21 Dec DD1XF (449/349) and DF3RU (449/449), and on 22 Dec during a thunder storm VE6TA (O/O) for initial #61.

JA9BOH

Kimio adds the following corrections to the information on JA EME already discussed in JA4BLC's report: JN1CSO has a high power license for 144 not 432. JA2ADH had preliminary permission back in 1988, but is still under construction. JA0VEI incorrectly listed in the Dubus listings as JA0VI. JA0VEI is not presently interested in EME, but is an active VHFer in JA. JA0EIV is interested in EME and working on his station. Kimio asks about the new QTH of K4QI (K4QIF) and G3LTF.

K1FO

Steve found 70 cm conditions excellent throughout the month of Dec. Activity was OK but not great and he was disappointed not to work any initials. Stations worked in Dec were on 07 Dec WA8WZG, on 14 Dec W7QX (new call for W9QXP) and N2IQU, on 15 Dec NU7Z, SM2CEW and DL8OBU, on 16 Dec KA0RYT and JA5OVU, on 18 Dec KA0RYT, on 19 Dec W8MQW and NC1I, and on 20 Dec W8MQW and RA3LE. Steve's elevation actuator was froze up and stuck at 42 deg el on Friday PM local. He did work RA3LE at 2240 as the moon passed through 42 deg on the way up. On the moon's way down (around 0230 to 0300) he did not work anyone. He braved the cold on Saturday afternoon to put electric heat tape on the actuator, but found that he didn't need it as it worked fine Saturday night even when the temperature dropped below 20 F. He

added on 21 Dec LX1DB, YO2IS, G3SEK and G3HUL, on 22 Dec ON4KNG, K5JL, W7CI, DF3RU, I5MPK - a very strong signal (589), UT7VF and K4QI, on 23 Dec K0RZ, KB8ZW, DK3FB and KL7HFQ, on 24 Dec W7QX, on 28 Dec WA4NJP, JA3IAF, JA5OVU, JO3RNL and JS3SIM, and on 29 Dec K5JL, K0RZ, W7QX and JA9BOH. Steve has increased his 70 cm initial count by 1. He originally worked JH1EFA several years ago in grid PM95. Shigeru was worked again in the 1996 EME contest located now in PM96. 70 cm EME totals for K1FO are 507 initials, 49 states and 75 DXCC.

K0RZ

Bill QSO'd on 21/22 Dec LX1DB, RA3LE (549/449) for initial #229, ON4KNG, EA3DXU, K5JL, DJ6MB and KF0M (O/O) #230, and on 22 Dec UT7VF, G3SEK and K1FO. Heard during SW were KA0RYT, N2IQU, DF3RU and PA3CSG. Condx were good but local high winds limited Bill's operating time. On 28 Dec he QSO'd JH4JLV and heard JO3RNL, and on 29 Dec K1FO and K5JL. Bill continues using the 8x22 el FO array in fixed vertical polarity.

K2DH

Dave's activity report for Dec -- I've certainly had my share of equipment troubles, but they seem to have finally been cured, and now I'm hoping for some good operating times in 97. After getting the KB2AH 6 tube amplifier running in late Nov, I noticed that my echoes seemed to sound really distorted - kind of Aurora-like. In addition, others I listened to and worked sounded the same. After discussing this with the guys on 75 m, they were listening for me the next time the moon came up, and sure enough, they all reported my echoes were almost without any tone. In fact, I received (T5) reports from several folks. This prompted me to start looking at the transceiver as the cause of the problem. I use an Icom IC-1271A on 23 cm and it turned out to have a PLL that was right on the edge of falling out of lock. Sometimes it would work OK, but other times (most of the time recently), it would distort the signal as the loop tried to hold lock. The problem, after a lot of looking, turned out to be one or more bad capacitors in the 70-100 MHz VCO of this PLL. Replacing them (disc ceramics and a small trimmer in the VCO) cured the problem and the reports are once again (T9). I also found that I seemed to have low gain in the 6 tube amp. As far as I knew, I was using good tubes, but to get to 500 w out required a LOT of drive. So, I investigated and found the input return loss of the amp to be only 3 dB at resonance. A double stub tuner on the input immediately got this to better than 30 dB. Now, the amp drives to 500 w with 40 in, and I can see much more output than that. I have been running it at between 600 and 700 w with no trouble, still with more than 10 dB of gain. In the process of improving the power output and gain of the amp, I realized I would have to replace the output coax I was using - a piece of Andrew 1/4" Superflex, which is only rated for 250 w at 1296. I installed a piece of 1/2" Foam Heliax and when I went to test to make sure everything worked properly, I made a mistake. I put the rig into transmit, hit the key, and saw only 200 w! What had happened??? I gave the anode tuner a twist, saw the output come WAY up, and at the same instant saw a very bright light coming from the amplifier compartment. It was the 50 ohm non-inductive parasitic suppresser in the B+ lead, and it was ON FIRE! It exploded with a huge bang and after I stopped shaking, I troubleshooted this event. My own stupidity was the cause - I had neglected to throw the switch controlling the changeover relays at the dish from receive into transmit. Thus, the amp was transmitting into an open piece of coax! Needless to say, it didn't like that, became a power oscillator and burned up the resistor. The quickness with which this happened probably saved the tubes, because the resistor opened up almost instantly, removing the B+ from them and surely destroying them. Replacing the resistor (and being more careful about switching) solved the problem, and I was back on the air in an hour. So over the period from the end of the contest through the holidays, I picked up 3 initials and a lot of knowledge. On 7 Dec, I had a partial with CT1DMK at 1236 (O/-) - I answered his CQ with my distorted signal, and he couldn't figure out my call, on 15 Dec 15 at 0100, WA8WZG (O/O) for initial #79, on 21 Dec 21 at 2335 partial CT1DMK (O/O) - he had my call wrong again and 2354 AA6WI (559/449), on 22 Dec at 0015

N2IQU (569/555), 0020 CT1DMK (559/525) #80, 0330 W2UHI (559/535), 2230 nil in sked with 4X6UJ, 2240 HB9BHU (559/559), 2258 F1ANH (559/549), 2314 ZS6AXT (559/569), 2333 WB5LUA (559/549) and (43/43) on SSB and 2353 W2UHI (559/548), on 23 Dec at 0447 NL7F (O/M) and again at 0500 in a sked NL7F (O/M) #81, on 29 I fixed the distortion, at 0407 N2IQU (579/569) and a good SSB QSO, 0420 KB2AH (589/569) on SSB, 0445 W2UHI (559/559), then N2IQU, KB2AH, W2UHI and I joined in a four-way roundtable for about 45 minutes on SSB - good signals all around, just chatting back and forth as if we were on 75 m, and on New Year's Day at 1445 W2UHI - the 1st for the year. I will not be active during the Jan SW (microwave op at an ARRL Jan VHF Contest station), but am available for skeds most anytime in the evenings or on weekends. One last comment- I wonder if there is any way we can convince somebody to get on 23 cm in South America? I've been working towards a goal of WAC on 23 cm for almost 9 years now, and the only continent I lack is SA. Can we convince someone to try it? I would be glad to help with things like relays, preamps, etc., if someone would make the commitment to get on and try to stay on.

KF0M

John (EM17, Kansas) in Dec worked JA2KRW, who is horiz pol, but heard nil from 7M2PDT and JS3SIM who are vert pol. He also completed with SM2CEW and K0RZ, sent (O) to HB9SV, DF3RU and DJ6MB [partials ?] and received only (T) copy or nil from the rest of his skeds. John will be working the ARRL VHF contest and only available for skeds on Friday evening of the Jan SW.

LA8LF

Anders worked 2 initials on 23 cm to bring him to #93 in Dec. He worked on 20 Dec KB3PD #92, 21 Dec ZS6AXT, PA3CSG, IK3COJ, G3LTF, K2UYH (SSB), CT1DMK and AA6WI, On 22 Dec WD5AGO, VE3BQN #93, W2UHI, F1ANH and ZS6AXT, and 23 Dec VE3BQN, G4DZU and CT1DMK. On Friday the 13th, in the middle of night we had a storm that lasted for only 30 min. I had not folded the tower to ground and a 5 m solid dish is quite a sail. The storm took out my big AZ drive 3 phase 1.5 HP motor and gearbox. The 30 mm steel shaft coming out of the gearbox was bent 25 deg. Fortunately I had a similar spare motor/gearbox, but it took me a full week to install because of cold WX - down to minus 22 deg C. The dish is now folded to ground and safe. If WX permit, I will be QRV 18/19 Jan.

LX1DB

Willie was QRV on Saturday of the post SW on 70 cm, but iced up on Sunday. He had a lot of ice, and used steam cleaner to remove most of the ice, but still could not move his 10 m dish. The inner section was still iced up, and he worried about windload. The temperature was running 12 deg C below season means. Willie describes the outside like "Holiday on Ice".

NL7F

Bill reports activating Alaska on 23 cm EME -- My 1st contact was a random on 21 Dec at 0210 with N2IQU (439/429). To the best of my knowledge this is the 1st ever 2-way contact with Alaska on 23 cm via any path. [I believe this is indeed the case!] On 22 Dec stations worked on schedule were SM2CEW, W2UHI and K2UYH. I have 350 w at feed of 3.7 m dish. I am interested in skeds. My e-mail is: Bill.NL7F

ON4KNG

Peter reports on his ARRL contest activity on 70 cm -- My final score was 56x27 with 15 initials. On 26 and 27 Oct I operated only 7 hrs. Saturday morning I had a failure in my transverter (RX part) and Sunday evening we had high wind in Brussels. Activity seemed lower than in the ARI contest. My score was 21x14. Initials for the 1st part were DF6NA, IK6EIW, SP5CJT for DXCC 29 and DL1EJA to bring me to #98. Initials for the 2nd part were JS3SIM, K5GW, K5AZU,

W7CI, EA8/ON5FF DXCC 30, DL6NAA, PA2CHR, PY5ZBU DXCC 31, HB9SUL, DK3FB and 7M2PDT for #109. Heard were F2TU, F1FEN, KA0RYT and OM1TL. In Dec 13 contacts were made including a new one RA3LE for #110 RA3LE. Skeds are welcome via BBS @ON7RC.BT.BE.EU or E-mail: Peter.ON4KNG

OK1DFC

Zdenek is now QRV on 432 EME. He has an array of 4 x 38 M2 yagis, an FO PA at 1.5 KW and a BV MGF1402 preamp. He was active during the contest but very limited by noise from local UHF telephone equipment which wipes out the band from 431.890 to 432.220. The telephone company has promised to correct the problem in Jan. Zdenek hopes to be able to operate normally during the Feb SW. During the contest he was able to QSO OK1KIR (M/O), DL6NAA (M/O), SM4IVE (559/549), G3SEK (M/O), OE5JFL (O/O), OH2PO (O/O) and DL9KR (449/559). Zdenek can be reached at tel 00420-601-285298 H, 00420-35-57701 W and 00420-35-57705 FAX. His address is (SAMEK Zdenek, Okruin 338, MEZIBORI, CZECH REP).

ON5OF

Dirk worked the following stations in the contest on 70 cm -- on 26 Oct /10/96 F1ANH, SM4IVE, OE5JFL, N2IQU, K1FO, NC1I, DL9KR, OH2PO, ON4KNG, DF3RU, JA9BOH, OZ4MM, HA1YA, DL1EJA initial #, and G4RGK, on 27 Oct WA4NJP #, UR5LX, EA3DXU, DL9NDD, G3SEK and SM3AKW, on 23 Nov W1ZX, DK3WG, K5AZU #, K2UYH, K5GW #, PA2CHR #, G3LTF, W7FN, SM2CEW, JA5OVU and DL9NDD (dup), and on 24 Nov EA8/ON5FF, K0RZ, W7CI, DJ6MB, F2TU, UT5DL, OZ4MM, DF3RU, partial SP5CJT, VE1ALQ # and new country, KD4LT and N4GJV. Our final score was 41x21 for 86100 points. On 23 Nov I tried to augment my HV from 1.65 kV using a variac. The cavity of the TH308 tube gave a BIG BANG when the HV insulation was not up to this! It took me some time to make repairs. So I was not QRV for my moonrise! I used 1650 v with 0.23 A for 620 w in the shack.

S59DCD

Silvo, S50X reports via e-mail [Silvo, S559DCD](mailto:Silvo.S559DCD), on his groups activity. They QSO'd on 1296 on 26 Oct at 1718 DL0SHF (539/O), 1807 OE5JFL (559/449) and 1812 EA3UM (449/O), on 22 Nov 2330 KB2AH (579/549) and 2344 W2UHI (559/439), on 23 Nov at 0045 OE9XXI (589/439), 0056 SM4DHN (539/O), 0106 OZ4MM (O/429), 1638 DL0SHF (449/339), 1651 F1ANH (539/429), 1703 F6CGJ (339/O), 1725 OH2AXH (449/439), 2142 OE5JFL (559/449), 2338 KB2AH (559/449) and 2352 K2UYH (339/549), On 24 Nov at 0001 K4QIF (439/O), 0033 F5PAU (569/449), 0047 VE1ALQ (539/449), 0126 LA8LF (449/439), 0201 W2UHI (449/O), 0205 N2IQU (559/549) and 1708 HB9BBD (529/429), on 30 Nov at 2240 SM3AKW (O/O), on 21 Dec at 2323 W2UHI (449/O), and on 22 Dec at 0108 AA6WI (M/M). WB5LUA not heard at sked time on 21 Dec. Their TX is IC 202 + MMT transverter + 10 W hybrid + 2 x 2C39BA at 150 w. RX is 2 x MGF 1302 NF of 0.45 dB. The ant is a 3 m dish with f/d of .36, circular pol and hand tracking.

SM2CEW

Peter reports good conditions on 432 -- I worked in Dec K5JL (569/569), KF0M (439/339) for initial #320, G3SEK (559/559), EA3DXU (449/539), DK3FC (O/O) #321, G4ALH (439/459) and DJ6MB (559/559). On 1296 I had a very nice contact with new station NL7F (O/O) for initial #90 and DXCC #24. This is probably the 1st SM-KL7 on 1296 QSO. Cold WX with bad icing here has prevented me from being on during the Christmas holidays.

SP5CJT

Mike QSO'd during the 1st part of EME Contest DF3RU, DL9NDD, DK3WG, DL9KR, OH2PO, UR5LX, OE5JFL, ON4KNG, OZ4MM, PA3CSG, SM4IVE, NC1I, K1FO, N2IQU, K4QIF and KD4LT. Unfortunately Mike was unable to be QRV during 2nd part of the EME contest due to a

work conflict.

VE4MA

Barry reports on his Dec post SW activity -- I was on for my 13 cm sked with IK2RTI, but had RX trouble. Heard him "M" in last 5 minutes while he was I had a 2 m RX converter die on me. On my I6PNN 5760 sked, I heard nil, but my own echoes were (M-O). I switched over to 1296 briefly and heard N2IQU very nice SSB, W2UHI, IK3COJ, and my own echoes good, but did not stick around. It was cold out. The wind chill was in the -40 to -50 deg region and my hands kept freezing with gloves on while trying to change feeds. The air temp is expected to get down to -34 C tonight.

W1ZX

Willie is looking for skeds with JA Stations for the Feb and March SWs. He can be reached via e-mail [Willie, W1ZX](mailto:Willie.W1ZX@nl) or the NL. Willie was on for the Dec SW for a few minutes. He VSWR problems and burned up the center pin in N connector of his 3" feedline before he made any QSOs. Heard were W8MQW and K4QI with big signals. Willie plans to be QRV for the Jan SW.

W2UHI

Frank had a great time in the Dec SW -- Conditions are always good on 1296 EME, I don't understand why more of you don't jump in and get your feet wet. No polarity to fight, reasonable You need at minimum a 5.5 m dish, a good low noise preamp, and 500 w, and you can have a ball. I worked on 21 Dec VE6TA (439/549), PA3CSG (579/569), S59DCD (O/449), K2UYH (53/55) on SSB - had a great chat, on 22 Dec AA6WI (539/549), LA8LF (559/449), CT1DMK (539/559), IK3COJ (439/439), N2IQU (579/559), K2DH (536/559), NL7F (O/O) for initial #83 and a new state and ZS6AXT (559/569), and on 23 Dec VE3BQN (339/549) and CT1DMK (539/539). On 25 Dec at 0110 I was echo testing and CT1DMK (559/559) put his echoes on top of mine. It kind of surprise me. He and I hide under the moon rocks and lay for you guys to show up. This past Saturday eve at 0430 the 75 m group that meet on 3846 kHz went up on the Moon and had a dandy 4 way round table on SSB. Included was KB2AH, N2IQU, K2DH, and myself, W2UHI. All good (Q5) copy.

WB5LUA

Al writes -- On 1296 MHz, I am up to initial #136 by recently working DJ9YW, YL3AG/A, F5PAU, KA0RYT/0, WA8WZG, F6KSX, CT1DMK, and NL7F. On 2304 MHz back in July I worked NU7Z for initial #33 and IK2RTI for #34 and WA8WZG #35 during the EME contest. During the contest on 5760 MHz, I worked DJ7FJ and VE4MA and on 10368 MHz during the contest, I worked F6KSX, DJ5FJ, AA5C and WA5VJB. Contest results were 38x21 on 1296, 6x6 on 2304, 2x2 on 5760 and 4X3 on 10368 MHz for a total score of 178,000. If it had not been for the bad weather on the last night of the EME contest, I would have completed contacts on 902, 1296, 2304, 3456, 5760 and 10368 MHz. Barry, VE4MA, and I were ready on 902 MHz and 3456 MHz. I am operational on EME on all of these bands. I just ran out of time and good weather. I would like to suggest a 3rd weekend, that can be devoted to EME at 2304 and above. The reason being that most stations tackle the EME contest to win and they know they are wasting their time above 2304 in terms of return of QSOs versus time spent. If we had a 3rd weekend it would increase the microwave EME activity which we need to do to help preserve the bands. I would like to see us have a Sept weekend devoted to EME on 2304 and above. The usual Oct and Nov weekends could be devoted to the primary EME bands, but one could also operate the higher bands. I would like to stir up activity on 2304 and higher. I know the discussions will be heated on this issue. I sent out several letters to Eur amateurs trying to set up skeds on 10 GHz during the contest and received no replies. I really believe there is NO incentive to operating the microwave bands during the contest. People who want to win the contest will not waste their time on 2304 and higher. It does not pay with the present activity level on the upper bands. I guess you

could have the higher frequency QSOs worth more points, but I still don't think that this is enough incentive. Or maybe it just needs to be a separate EME contest for just 2304 and higher and leave the present contest the way it is. Approximate activity level on the other EME bands today is 902 5 stations, 2304 35 to 50 stations, 3456 3 stations, 5760 7 to 10 stations, and 10368 15 to 25 stations. These numbers are approximate. In a lot of cases, people who only operate these bands don't do much operating because they are not sure when to be on because they know that most folks are on 1296 and lower so they give up and go on to something else. Not a good situation. I know the numbers are not great but we need to improve these by supporting activity on these bands. A lot of people get on and make a contact and then go on to something else. A contest dedicated to microwave EME may help change this around. At present I can operate EME on 1296 MHz with a dedicated 24 ft dish and 500 w. My 5 meter dish has a 10368 feed at the primary focus of the dish with a 100 w TWT mounted behind the dish. I use offset feeds for 2304, 3456 and 5760 MHz which are permanently mounted in a cluster around the 10368 feed. Power is 350 w on 2304 MHz, 250 w on 3456 MHz, and 40 w on 5760 MHz. Although my offsets are up to several deg depending on the band, I see no degradation in sun or moon noise. I guess this speaks for the surface of the dish. I am open for skeds anytime day or night and most of the time any day of the week.

YO2IS

Szigy e-mails -- I was glad to take part in my 7th ARRL EME Competition. I was QRV on both 70 and 200 cm EME, and submitted via the E-mail facility a "MB-SO" contest-log, the 1st of this kind from Romania! The ARRL Contest showed good activity on 432. Condx where mixed. My NA window is heavily QRM'd by close CATV cables! Stations QSO'd were on 26/27 Oct SM4IVE, OE5JFL, DL9NDD, OZ4MM, OH2PO, DL9KR, DK3WG, UR5LX, DF3RU, N2IQU, K1FO, DL1EJA for initial #134, NC1I, I2COR, WA4NJP, K4QIF, KD4LT, SM2CEW, JA9BOH, SM3AKW, G3SEK and G4RGK - all random; heard or CWNr were DL9EBL, JS3SIM, ZS6AXT, UA6LGH, EA3DXU, F1FEN, IN3KLQ and SP5CJT; and on 23/24 Nov JA5OVU, HA1YA, ON4KNG and DJ6MB; heard or CWNr were ON5OF, OK1DFC and W1ZX. In the Dec SW, I was very pleased to count my 500th QSO "via 70 cm EME" on 21 Dec. JA5OVU was 499 and ON4KNG was 500. I also QSO'd on random K1FO (569/449), and on sked at 20.30 IK6EIW (M/M) and 2300 partial W7HAH (O/M) - no R's. I am still looking for a 9M2BV QSL, and a QSO with Oceania to complete my WAC. Skeds are always welcome, but don't forget to QSL if the QSO succeeds - Hi.

ZS6AXT

Ivo is now on e-mail and sends his greetings -- My dish is by now repaired and works quite well, in fact better than before. I removed the 70 cm feed and added a 13 cm W2IMU feed - a bit offset. For 70 cm I started on an array of 4 x 8 5 w/ BV yagis. I hope to get at least 1 dB more gain than before. For 13 cm I will be using 7/8" Heliax, 15 m long, same as for 23cm. I made up connectors and measured the loss on 13 cm. It is just 1 dB, to my surprise, I expected more. I built 3 N6CA 2C39 PAs, one for testing the tubes, and the other 2 to combine to increase my present power by (I hope) 3db. The PA is really excellent, works very well, most tubes are giving around 200 w out. One even made 250 w+! But a piece of dirt on the TEFLON tuning cap was glowing like a neon tube! Some time ago one of the G stations mentioned that he can manufacture the stripline part of the DJ9BV design of the 90 deg hybrid very accurately with a laser cutter. I am interested, but could not find now, who was it! [Can anyone help?] In a lot of articles people measure power at 23 cm with Bird 400-1000 MHz elements. I found that 230 w measured with a 1.26 GHz 250 w element measures 400 w with 500 w 400-1000 MHz element and 350 w with 1 KW 400-1000 MHz element! So these measurement can be are very optimistic. [When using any Bird element at 500 MHz and above, you have to be very careful.] My activity in Dec was not very high, but I still managed to work 2 initials. Conditions were generally good. I QSO'd on 1296 on 14 Dec HB9BHU (569/559) - before the dish repair I never got better than 439, JR4BRS, CT1DMK,

N2IQU and W2UHI, on 15 Dec VK1KED (O/O) for initial #113, OE9XXI on CW and SSB, CT1DMK and HB9BHU, on 21 Dec DF3RU, HB9SV on CW & SSB, IK3COJ, CT1DMK (559/449), OH2AXH, F5PL, PA3CSG, G3LTF and CWNR VE6TA, on 22 Dec IK3COJ, F1ANH, VE1ZJ, F1ANH on SSB (54/43), G3LTF, CT1DMK, W2UHI, K2DH (569/559) and CWNR G4DZU, and on 28 Dec DH9FAG (429/419) - at the end was (539) #114, OE9ERC, JH5LUZ and heard HB9BBD - good signals all round despite the Apogee conditions.

ZS6PT

Peter sends an update on his 70 cm activity -- I have installed a 2nd LNA (DJ9BV design) to my system. I also made the feed system on the dish adjustable - what a difference when Faraday starts to play around! With only 60 w output, I made my 1st 5 EME QSOs during the 2nd contest weekend. QSO'd on 432 were OH2PO for initial #1, DL9KR #2, SM4IVE #3 and OE5JFL #4. I called OH2PO only twice and he came back to me. I am still using the 5.2 m dish, but will increase power with a solid state amplifier early next year.

K2UYH

I was active on several weekends in Dec as a result of e- mail arranged extra skeds. We worked on 70 cm, on 14 Dec at 1910 nil DL3EAG - we were on late for this sked due to a delay at work, 1942 W7QX (449/449) - thought I had a new one at 1st, 2002 N2IQU (56/56) on SSB and KA0RYT (559/549), on 15 Dec at 1909 N2IQU (559/559), 1930 DL8OBU (449/439), 2000 DL3EAG (O/O) for initial #584 and DL4KG (O/O) #585 - surprised by the new call, on 20 Dec - it was very cold; I had difficulty getting the dish to move and my polarization rotator refused to turn forcing operation with pol fixed at about 45 deg from horiz - at 2335 KA0RYT (549/559) and 2345 UR5LX (55/54) on SSB, on 21 Dec at 0115 K4QI (55/55) on SSB - also copied W8MQW on SSB QSO calling K4QI; later the dish froze and I was unable to move it far enough west to operate during the JA window; I switched to 23 cm for the next moonrise, 2312 LA8LF (559/559) and (55/54) on SSB, 2325 G3LTF (54/53) on SSB and initial #141 and 2334 W2UHI (55/53) on SSB - real EME rag chew, on 22 Dec at 0100 IK3COJ (449/449), 0021 AA6WI (559/549), 0045 VE6TA (549/459), 0117 N2IQU (56/54) on SSB, 0140 CT1DMK (54/44) on SSB and 0520 NL7F (549/539) #142, state 35 and DXCC 33, and on 23 Dec, back on 70 cm at 0520 KL7HFQ (O/O) #586 - very marginal. In Jan I plan to try one of KB2AH's scalar horn feeds on 1296.

NETNEWS

TB has 4 yagis and 900 w on 432 EME. Also on 70 cm EME are N8ZAT, a YL (she is also YH7XM) and N8XA.

KD4LT is QRV on 70 cm only. His 23 cm dish is nearly ready to go, but the mount still needs work. Most likely he will not be on until March.

KB8ZW was QRV on Sunday in Dec and worked a K4QI and others.

W6WE missed his Dec skeds. He came home from work very sick and spent a couple of days on the mend.

KB0PYO had RX problems on 23 cm in Dec. He found a bad relay, and will try to be QRV in Jan. His 23 cm standing is 3x3.

DK3WG's antennas were iced up during the post SW .. -15 deg C temp.

DF3RU heard VK2BE on 70 cm and CWNR for 1/2 hour. Karl also heard NA4N in the contest.

WA9FWD is believed to be QRV on 23 cm again.

W7QX (new call of W9QXP) had a nice contact with VE1ALQ on 24 Dec.

KL7HFQ worked WB6IMC, KA0RYT and K2UYH on sked in Dec.

WD5AGO will be in Jan during the ARRL VHF Contest to pass out grids.

KA0RYT completed with KL7HFQ.

K5JL was QRV the post SW and worked a number of stations on Saturday night on 70 cm. He is planning to be on 23 cm in Jan.

K9BCT/4 fried his WD5AGO preamp, and will not be QRV until repaired.

W7AO is the new call of W4WD. Russ' e-mail is [Russ.W7AO](mailto:Russ.W7AO@comcast.net)

SV1BTR has plans for mid Jan operation on 70 cm EME.

I5CTE worked 7M2PDT on sked in Dec.

PA3CSG was QRV on 1296 during the Dec SW and added initials with CT1DMK, VE6TA, W2UHI and DD1XF.

G4FUF missed most of his Dec SW skeds due to bad WX. He request no more skeds until further notice as he will be in DL land for 6 months.

I5TDJ worked during Dec SW KA0RYT and 7M2PDT.

IK0EQJ had a PA failure and missed his Dec skeds. He will be QRV again in Jan.

IN3KLQ is QRV on 432 with 4 x 21 F9FT yagis and 6000 w [?]. He is interested in sked for the Jan SW, but notes his elevation is limited to angles between 10 and 50 degs.

VE1ALQ had problems with wind during the Dec SW and missed his WB6IMC sked.

W7CI was QRV on 70 cm during the Dec SW, but found very little activity.

WA8WZG is QRV on 70 and 23 cm EME. He worked K2DH on 23 cm, but had trouble with his jackscrew during the Dec SW and had to cancel skeds LA8LF and KL7HFQ. He heard N4GJV.

W4HHK worked on 13 cm during the Dec SW W7GBI and IK2RTI for initial #34.

DJ9YW has a new FAX number ++49 5155 983256.

FOR SALE

K1FO has for available **Lunar-Link Systems LA-70B, 70 cm, LA-135 222 MHz and LA-200, 2 m amplifiers**. All are compact desk top RF decks that run 1500 w output and use (2) 3CX800A7 tubes. A rack mount option for the RF decks has been added. Also available are **PS-70 power supplies** with different voltage options allowing their use with other amplifiers such as 7289 23 cm amps or 8877 2 m amplifiers. Full load DC voltages can be provided from 1200 VDC to 2750 VDC. Typical ICAS current

ratings are 2.0 A @ 1500 V, 1.4A @ 2300 V and 1.2A @ 2750 V. Contact Steve, K1FO at 203-421-3377.

W1ZX has the following items from '96 Int'l EME Conference available - all with the conference logo of course: **Hats (\$7), Clocks (\$30)**. The Conference Proceedings also still available for \$US12 + shipping States \$3, Europe \$US12 via Air Mail. These are the last of the Proceedings. He also has a **GR IF amplifier 1236A<**. \$US150 + shipping, **Dielectric-Coaxial Dynamics 1000A** Wattmeter \$US135 + shipping, **Bird 43 Wattmeter** (1) \$175, (2) \$190, (3) \$200 with new meter movement + shipping, **AIL 75 Noise Figure Meter with cabinet** \$US275 & shipping, **AIL 7010 Noise Generator** \$US50, **AIL 70 Diode Noise Generator** \$US50, **Hewlett Packard 349A UHF Noise Source** \$US75, **Noise Comm Noise Diodes NC305** \$33, Several **Transco "Y" type Relays with "N" Connectors** \$US55 + shipping; Call Willie at 301 645 5584 between 2000-2230 EST, FAX 301 645 6853, 24 hrs, e-mail Willie.W1ZX

NU7Z is looking for a **small xfmr to yield 1200 Vac at .5 a.**

VE6TA is looking for a **pair of 8930s or 4CX250Rs**. He is also interested in a **23 cm PA**.

WB6IMC is looking for **70 cm EME skeds**.

WA8WZG reports that he is your "Andrews Connector Connection". He has **connectors, cables, waveguide, assorted jumpers, etc.** for sale. He notes that his stock changes weekly. Call Tom a (419) 732-2944 or on e-mail at: Tom.WA8WZG

KB2AH has a **full line of cavity amps and 1, 2, 4 and 6 tube ring amps, lin/circular feed horns and LNAs**. For full details see Tom's 1296 WEB page [WEB page](#) or email Tom.KB2AH

FINAL

You will note that this is the Jan(2) issue of the NL. I decided to put out 2 Jan issues to get the NL date and skeds back in sync.

F5HRY writes that his group is **hard at work on preparations for the 1998 International EME Conference**. If anyone has special ideas or requirements, i.e. dates, please let Herve know at packet (F5HRY@F6PTT.FRPA.FRA.EU) or e-mail to: F1EHN. They plan to have the major portion of the conference in Paris and need to make reservations quite early.

W0KJY reports that the US RF hazard requirements has been delayed one year. Jim also notes that he is working on the EME Standings. Standings for QST can be sent directly to the ARRL by e-mail to [EME Standing](#) were due the beginning of Jan.

Virtually all reports this past month contained holiday and New Years greetings. To save space I did not include these with the reports. On behalf of all NL contributors let me express a universal wish for a joyous and prosperous New Year! 73 and CU off the Moon, Al - K2UYH

Skeds for JAN 18

| | | | | | |
|-------|----------|-------------|---------|---------|-------------|
| Time | 432.031 | 432.045 | 432.055 | 432.060 | 432.070 |
| 0000z | N4UK -CQ | W6WE -DK3WG | | | |
| 0430z | | | | | 7M2PDT-W1ZX |

| | | | |
|-------|---------------|---------------|----------------------------|
| 0500z | | JA2TY -K2UYH | 7M2PDT-NA4N |
| 0530z | VE1ALQ-NA4N | | 7M2PDT-WI7Z |
| 0600z | JA0VI -N4GJV | | 7M2PDT-W8MQW |
| 0630z | JA0YSH-WB0GGM | | 7M2PDT-W7CI |
| 0700z | | | 7M2PDT-N4PZ |
| 0730z | | | 7M2PDT-KA0RYT |
| 0800z | | | 7M2PDT-K6MYC |
| 1300z | DK3FB -7M2PDT | | |
| 1330z | OH3LWP-7M2PDT | | |
| 1400z | IK0EQJ-7M2PDT | | |
| 1430z | UT7VF -7M2PDT | EA3DXU-9M2BV | IK0EQJ-JA9BOH |
| 1500z | G3HUL -7M2PDT | IW5AVM-EA3DXU | HB9SV -IK0EQJ |
| 1530z | EA8/ON-7M2PDT | | DL9NDD-JH1EFA |
| 1600z | | | DL9NDD-JA0VI 4X1IF-7M2PDT |
| 1630z | CT1DMK-7M2PDT | | |
| 1700z | G4ALH -7M2PDT | | |
| 2030z | HP3XUG-OK1KIR | | OK1DFC-YO2IS |
| 2100z | | KB8ZW -HB9SUL | HP3XUG-YO2IS |
| 2130z | W8MQW -EA3DXU | | K5GW -YO2IS KA0RYT-DL9NDD |
| 2200z | WD5AGO-EA3DXU | KB8ZW -LU7DZ | W7CI -YO2IS |
| 2230z | | KB8ZW -HA1YA | WA8WZG-DL9KR KF0M-DL9NDD |
| 2300z | | | WA8WZG-G3LTF WB6IMC-DL9NDD |
| 2330z | VE1ALQ-IK0EQJ | WB0GGM-EA8/ON | KL7HFQ-DL9NDD |

Skeds for JAN 19

| | | | | |
|-------|--------------|---------------|--------------|--------------|
| Time | 432.031 | 432.045 | 432.055 | 432.070 |
| 0000z | | HP3XUG-VE1ALQ | KL7HFQ-K2UYH | WI7Z -DL9NDD |
| 0030z | | KL7HFQ-IK0EQJ | WA8WZG-K2UYH | |
| 0100z | | KL7HFQ-KB8ZW | | |
| 0200z | N4UK -N4GJV | WB0GGM-W8MQW | | |
| 0230z | N4UK -KD4LT | WA8WZG-N4GJV | NC7K -VE1ALQ | |
| 0300z | N4UK -KA0RYT | WB0GGM-WB6IMC | NC7K -K2UYH | |
| 0330z | N4UK -K0RZ | | | |
| 0430z | | KA0RYT-KB8ZW | | |
| 2100z | N4UK -DK3WG | | | |
| 2130z | N4UK -UR5LX | | | |
| 2200z | N4UK -VE1ALQ | | | |
| 2230z | N4UK -DL9NDD | W7HAH -YO2IS | | |
| 2300z | N4UK -OK1KIR | | | |
| 2330z | N4UK -SM2CEW | | | |

Skeds for JAN 20

| | |
|-------|-------------|
| Time | 432.031 |
| 0000z | N4UK -K2UYH |
| 0030z | N4UK -DK3FB |
| 0100z | N4UK -G3LTF |
| 0130z | N4UK -W7CI |

Abbreviated calls in this list :
EA8/ON = EA8/ON5FF

Skeds for JAN 19

| | | |
|-------|---------------|--------------|
| Time | 1296.050 | 1296.075 |
| 0000z | | K2DH -S59DCD |
| 0030z | VE6TA -VE3BQN | K2DH -G4CCH |
| 0100z | VE6TA -G4DZU | K2DH -G3LQR |

0500z KB0PYD-K2UYH
 1730z 4X6UJ -OK1KIR
 1900z OZ4MM -4X6UJ
 2030z VE1ALQ-4X6UJ
 2100z W2UHI -4X6UJ
 2200z K2DH -4X6UJ
 2230z WD5AGO-CT1DMK WA8WZG-S59DCD
 2300z WD5AGO-4X6UJ VE4MA -S59DCD
 2330z WB5LUA-S59DCD

Skeds for JAN 18

Time 2304.050

1530z OZ4MM -CQ
 1600z OZ4MM -EA3UM
 1730z OZ4MM -DF3RU
 2200z W4HHK -DF3RU

New Operating procedures

by G3SEK

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One of the advantages of variable/switchable polarization is the ability to deliver a horizontally-polarized signal into a given "target area". But before you can do this, you need to receive a "calibration" signal from a station transmitting from that area with a known polarization. This is becoming increasingly difficult as more stations have the ability to change polarization, because these are the ones you usually hear first. Maybe it's time to formalize an way to ask a station with variable polarization to transmit horizontal or vertical for calibration purposes.

This comes "after" the basic QSO exchange, of course.

Proposal:

H? H? H? = please transmit horizontally polarized.

H H H = I am transmitting horizontally polarized.

V? V? V? = please transmit vertically polarized.

V V V = I am transmitting vertically polarized.

These exchanges would also be very useful to separate the horizontal from the vertical stations in JA!

Comments, please?

If you receive the 432 & Above NewsLetter from Allen, K2UYH (paper version), and your CALLSIGN does NOT appear in this list. Or there is a correction to be made please contact me, VE1ALQ as soon as possible. We know there are a number of calls that will not appear in this first printing, and for that we do apologize. But we do want to see your call in the list. Please see below at bottom of list.

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A22BW, AA4TJ, AA6WI, CX9BT, DD1XF, DF3RU, DF5YY, DF6NA, DF9QX, DJ7FJ, DJ8LQ,
DJ9YW, DK3WG, DK8VS, DL4EBY, DL6WU, DL9EBL, DL9KR, DL9NDD, EA2BK, EA2LU,
EA3DXU, EA3UM, F1ANH, F2TU, F5EHQ, F5HRY, F5PAU, F6CGJ, F9FT, G0BPU, G3HUL,
G3LQR, G3LTF, G3SEK, G4ALH, G4ERG, G4GCM, G4RGK, GM3JFG, GW3XYW, HB9BBD,
HB9BHU, HB9JAW, HB9SUL, HB9SV, I2COR, I5TDJ, I6PNN, IK1HWG, IK3COJ, IK5WJD,
IK6EIW, JA2JRJ, JA2KRW, JA4BLC, JA5OVU, JA6AHB, JA6CZD, JA8ERE, JR8FLY, JA9BOH,
JH0YSI, JH1MOM, JH3EAO, JH4JLV, JL1ZCG, JR1RCH, K0KJX, K0RZ, K0TLN, K1FO, K1OYB,
K1RQG, K1RSA, K1VYU, K2MPH, K2OS, K2RIW, K2TKN, K2UYH, K3EAV, K3HZO, K3LFO,
K3XA, K4QIF, K5AZU, K9BCT/4, K9KFR, K9ZZH, KA0RYT, KB2AH, KB3PD, KB8ZW, KB9CTS,
KD6R, LA8LF, N1AXB, N2IQU, N2LIV, N4GJV, N4MW, N4PZ, N6OC, N7ART, N7AUV, N9AB,
NA4N, NC1I, OE5JFL, OE6AP, OE9ERC, OE9XXI, OH2DG, OK1KIR, ON4AOD, ON4KNG,
ON4UV, ON5OF, ON5RR, ON6JY, OZ4MM, PA0AVS, PA0PLY, PA0SSB, W6/PA0ZN, PA3CSG,
PA3DZL, S51ZO, S56UUU, W6/SM0PYP, SM2BYA, SM3AKW, SM6CKU, SP5CJT, VE1ALQ,
VE2XX, VE1ASO, VE3BQN, VE3CF, VE4MA, VE7BBG, VK1VP, VK2ALU, VK2BE, VK2FZ/4,
VK3UM, VK5MC, W0KJY, W0RRY, W1CAL, W1JR, W1ZX, W2CRS, W2JWJ, W2UHI, W2WD,
W3EP, W3IIT, W4HHK, W4RDI, W5RCI, W6DXJ, W6XS, W7FN, W7GBI, W7HAH, W7ID,
W7VQQ, W8IDU, W8MQW, W8TN, WA4NJP, WA4OFS, WA4ZTK, WA5VJB, WA7CJO, WA7TZY,
WA8WZG, WA9FWD, WB0GGM, WB2VVV, WD5AGO, WI7Z, YO2IS, ZS6AXT, ZS6JT, ZS6PT

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I may be reached at any of the following:

| | |
|----------------|-----------------------------------|
| (postal) | |
| Darrell Ward | Phone / FAX: 1 506 738 2734 |
| PO Box 576 | FAX: 1 507 738 8512 |
| Grand Bay N.B | E-mail: velalq@nbnet.nb.ca |
| Canada E0G 1W0 | KO-23: velalq |
| | Home BBS: velalq @ve9bbs.nb.ca.na |

VE1ALQ ENCODER UPDATE

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As many are aware, some time ago I had designed an "encoder" package to support the F1EHN Az & El interface hardware & software.

The firmware was written for me to supply 16bit wide parallel data over the range of 0 to 360deg. Az and 0 to 90deg El. This provides 0.01deg. accuracy to conform with the full capability of F1EHN's interface.

At this point in time I have supplied "touch memory" and programmed "Eprom" devices to construct 62 of these units, and I know there are more than this number being built.

As most of us are aware to support 16bit wide data to the fullest "accuracy" and "resolution" a quadrature input count of 65,536 counts is required. There are a number of these units being operated with far fewer quadrature counts (pulses) than this, and as a result their overall accuracy and repeatability is suffering greatly.

I operate my system with approx. 35,000 counts over the half span range of 0 to 180deg. It need not be this high, that is just where it happened to ratio out at. I also never operate the dish over the full 0 to 360deg, so overflow is never a problem.

The point I want to make and perhaps eliminate some hardship and poor results is this: The quadrature counts must be maintained at a level that will provide reasonable accuracy and repeatability at the 16bit wide data level.

It is not necessary to supply the full 65,536 counts (40K & up for 360deg. would do fine), because the 80C31 MPU will be instructed to accurately do the mathematics and provided the 16bit wide data with the counts it has available to it. However the lower the counts the lower everything else will be, accuracy, repeatability, etc.etc.

I have acquired from US Digital an LS-7084 IC (8 pin device) that will allow you to increase your quadrature counts by 4. Each pair of quadrature pulses will generate 1 count or 4 counts, depending on pin 6 being "high" for X4, or "low" for X1.

I have ordered several of these devices and they are available at cost (\$3.05US) + postage. I will also supply schematic and details with the LS-7084. This is a very simple addition that will also eliminate any false counting that may have been encountered.

I may be contacted via:

E-mail: Darrell_VE1ALQ

Phone: 1 506 738-2734
FAX: 1 506 738-8512 (Machine)
BBS: ve1alq @ve9bbs.nb.ca
BBS: KO-23

[432MHz & up EME skeds](#)

Please Inform Darrell, by e-mail VE1ALQ if you receive this Newsletter

and by which means (Mail/WEB etc)

This information was obtained from [Scott, KD4LT](#)

[Top Page](#)

For Comments or corrections: [Rein, W6/PA0ZN](#)
